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February 24, 2011

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*Thibault*  
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RECEIVED *Aug 24/11*  
EXAMINER  
PATENT EXAMINER

**Application No.** : **2,444,211**  
**Owner** : SCIBASE AB  
**Title** : **DETERMINATION OF BIOLOGICAL CONDITIONS USING  
IMPEDANCE MEASUREMENTS**  
**Classification** : A61B 5/053 (2006.01)  
**Your File No.** : **69051/00004**  
**Examiner** : Tanya Novo-Verde

YOU ARE HEREBY NOTIFIED OF A REQUISITION BY THE EXAMINER IN ACCORDANCE WITH SUBSECTION 30(2) OF THE *PATENT RULES*. IN ORDER TO AVOID ABANDONMENT UNDER PARAGRAPH 73(1)(a) OF THE *PATENT ACT*, A WRITTEN REPLY MUST BE RECEIVED WITHIN 6 MONTHS AFTER THE ABOVE DATE.

This application has been examined as originally filed.

The number of claims in this application is 29.

The search of the prior art has revealed the following:

**Reference Applied:**

Canadian Application

**D1:** CA 2318735 July 25, 2000

Wickett et al.

**Reference of Interest:**

PCT Application

**D2:** WO 99/39627 □ August 12, 1999

Elden et al.

□ citation stemming from EPO search report

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D1 discloses a method and apparatus for non-invasively determining glucose level in fluid of subject, typically blood glucose level. Impedance of skin tissue is measured and the measurement is used with impedance measurements previously correlated with directly determined glucose levels to determine the glucose level from the newly measured impedance.

D2 discloses a method and apparatus for non invasively monitoring levels of glucose in a body fluid of a subject

The examiner has identified the following defects in the application:

### ***Obviousness***

Claims 1 to 29 do not comply with section 28.3 of the *Patent Act*. The subject matter of these claims would have been obvious on the claim date to a person skilled in the art or science to which it pertains having regard to D1 and in light of the common general knowledge in the art.

As to claim 1, D1 discloses a method for the non-invasive determination of the concentration of a substance (glucose) in blood of a subject (page 3, lines 2-4), the method comprising the steps of-

(a) placing an electrical conducting probe against a skin surface of the subject, wherein the probe comprises a plurality of electrodes (page 16, lines 3-5), each electrode being laterally spaced apart from each other and being of sufficient length to penetrate the stratum corneum (page 5, lines 5-6: *"Electrodes of a probe of the invention can be spaced between about 0.2 mm and about 2 cm from each other"*; Claim 1);

(b) passing an electrical current through the electrodes to obtain a value of impedance for the skin (page 5, lines 8-12: *"means for measuring impedance of skin tissue in response to a voltage applied thereto and a microprocessor operatively connected to the means for measuring impedance, for determining the amount of glucose in the body fluid based upon the impedance measurements"*); and

(c) converting the impedance to said concentration (page 13, lines 18-20; Claim 4: *"determining the amount of glucose in the body fluid based upon the measured impedance"*).

D1 does not disclose the feature of each electrode comprising a spike. However, such a feature does not add a novel or inventive aspect to the electrode as the electrode as disclosed in D1 is capable of penetrating the stratum corneum without the use of a spike and serves the same function as the subject application. Therefore, claim 1 is obvious having regard to D1 in view of the common general knowledge in the art as demonstrated in reference D2. The same objections are applied to claim 14.

Dependent claims 2 to 13 and 14 to 29 do not define any additional features that would distinguish them from D1 and the common general knowledge in the art as demonstrated in reference D2, hence the subject matter is deemed obvious.

**Claims**

Claims 7 to 12 do not comply with 87(1) of the *Patent Rules*. More specifically, the claims shall refer by number to the claim which dependency is directed from. The claims must be amended in order to comply.

Claims 17, 18 and 22 to 27 are indefinite and do not comply with 27(4) of the *Patent Act*. More specifically, the claim dependency is directed to a range of claims in an unclear manner. The suggested format should be "in any one of claims". Please amend the listed claims accordingly in order to comply.

Claims 5, 6, 7, 8, 9, 11, 12, 20, 21, 22, 23, 24, 26 and 27 are indefinite and do not comply with subsection 27(4) of the *Patent Act*. The inclusion of the ranges specified in the claims causes ambiguity.

**Description**

The description contains statements that incorporate by reference other documents and does not comply with subsection 81(1) of the *Patent Rules*. Such statements are found at page 1, lines 1-2 and page 9, lines 5-6 and should be removed.

In view of the foregoing defects, the applicant is requisitioned, under subsection 30(2) of the *Patent Rules*, to amend the application in order to comply with the *Patent Act* and the *Patent Rules* or to provide arguments as to why the application does comply.

Under section 34 of the *Patent Rules*, any amendment made in response to this requisition must be accompanied by a statement explaining the nature thereof, and how it corrects each of the above identified defects.

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Patent Examiner  
819-934-4891